



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,942	06/22/2001	Hayao Watanabe	Q43872	7069

7590 09/17/2002

Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,942

Applicant(s)

WATANABE ET AL.

Examiner

Tamai IE Karl

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25 is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Reissue Applications

1. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Oath/Declaration

2. The reissue oath/declaration filed with this application is defective because the error which is relied upon to support the reissue application is not an error upon which a reissue can be based. See 37 CFR 1.175(a)(1) and MPEP § 1414. The reissue error is not correctable by reissue because the applicants surrendered use of any displacement measuring means during the prosecution of the parent.
3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing or post office address of each inventor. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

Recapture

4. Claims 25-42 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

The Applicant amended and argued in paper 10 dated 4/14/98 to specifically that the displacement measuring device must have a resolver rotor and stator. The amendment and argument cancelled claim 1 in favor of the narrower limitation of claim 2 with the resolver rotor and stator to place the claim in condition for allowance. Therefore, they applicant/assignee cannot attempt to recapture the surrendered subject matter.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2834

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 31, 32, and 33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not have a full, clear, concise, and exact written description of the reinforcing means being substantially the same non-magnetic metal as the partition wall.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 31, 32, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 31-33 are vague and indefinite because it is unclear what constitutes "substantially" the same material. The specification is silent on any guidelines as to variations which are acceptable for "substantially" the same.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2834

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 25, 27, 28, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Horikoshi et al. (Horikoshi)(JP 03-150,041). Horikoshi teaches a sealed actuator with a stator 15 mounted on a housing 11 opposite a magnetic rotor 16 mounted on roller bearings 17, 18 and having a non-magnetic partition wall in between the rotor and stator which hermetically seals the rotor space from the stator space. The motor having magnetic encoder 23 and a rotor with salient teeth 29.

11. Claims 25, 26, 28, 29, 31, 32, 37, 38, 40 and 41 are rejected under 35 U.S.C. 102(b) as anticipated by Applicant's Admitted Prior Art (AAPA) or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Applicant's Admitted Prior Art (AAPA) in view of Hofmeister (WO 94/23911). AAPA teaches a plurality of actuators with stators hermetically sealed behind non-magnetic material, with roller bearings supporting the rotors. AAPA teaches a reinforcing means for the wall being the portion of the wall which expands radially outward to the coil endturns when the wall is axially outside the air gap between the rotor and stator. The reinforcing wall being the same material as the wall between the rotor and stator. The roller bearings being on opposite sides of the wall between the stator and rotor. AAPA shows but does not describe optical encoders below bearing 219. Hofmeister shows that the encoders shown in AAPA are optical encoders 13, 14. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motors of AAPA with the optical encoders of Hofmeister to control the drive motors.

Art Unit: 2834

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi et al. (Horikoshi)(JP 03-150,041) and Jacquin (FR 2,527,854). Horikoshi teaches every aspect of the invention an optical encoder. Jacquin teaches the equivalence of magnetic and optical encoders for controlling motors across a sealed enclosure. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Horikoshi with the optical encoder of Jacquin to provide a faster control of the motor based on rotor displacement and because it is within the ordinary skill in the art to choose between known equivalents.

14. Claims 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi et al. (Horikoshi)(JP 03-150,041) and Hancock et al. (Hancock)(US 499159). Horikoshi teaches every aspect of the invention except the rotor being made of magnetic steel with salient poles. Hancock teaches a variable reluctance motor with magnetic steel, salient poles to provide a continuous rotation variable speed drive. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Horikoshi with the magnetic steel, salient poles of Hancock to provide a continuous rotation variable speed drive.

15. Claims 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi et al. (Horikoshi)(JP 03-150,041) and Hancock et al. (Hancock)(US 499159), in further view of Jacquin (FR 2,527,854). Horikoshi and Hancock teach every aspect of the invention an optical encoder. Jacquin teaches the equivalence of magnetic and optical encoders for controlling motors across a sealed enclosure. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Horikoshi and Hancock with the optical encoder of Jacquin to provide a faster control of the motor based on rotor displacement and because it is within the ordinary skill in the art to choose between known equivalents.

16. Claims 27, 30, 33, 39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA)(may include Hofmiester) and Jacquin (FR 2,527,854). AAPA teaches every aspect of the invention except a magnetic encoder. Jacquin teaches the equivalence of magnetic and optical encoders for controlling motors across a sealed enclosure. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of AAPA with the magnetic encoder to provide remote commutation of the stator coils which protects the encoder and because it is within the ordinary skill in the art to choose between known equivalents.

Allowable Subject Matter


17. Claims 1-25 are allowed.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
September 15, 2002

 KARL TAMAI
PRIMARY EXAMINER